

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: vancleef@netcom.com (Henry van Cleef)
Subject: 6V6 bias
Message-ID: <199701060657.XAA24400@netcom2.netcom.com>

I see a bunch of postings about getting audio out of old comm. sets, proper bias, and so forth. Many of these sets use a 6V6, single-ended.

You can get into a lot of folderol setting up a 6V6, and reading the literature doesn't simplify things. I'll cut through some of this with my super-simple approach. This assumes that B+ in the set is 250 volts (285 on the 6V6 is essentially the same), and that the output transformer is around 3000-4000 ohms.

For good hard core class A operation, set the bias around -12.5 volts. Remember that this voltage is measured grid-to-cathode. This will give right on 50 ma. cathode current, of which 45 is plate current, 5 screen current. This "10% I_k " for the screen is standard for beam tetrodes. Pentodes like 6F6 and 6K6 have a higher percentage in the screen. Audio drive should be 20 volts peak-peak, maximum. With a plain vanilla 8-inch speaker in an open box, that is a ton of audio power. That gives a range -2.5 volts to -22.5 volts on the grid, which is about all you can put on a 6V6 without approaching the near-cutoff distortion point too hard. Note that a 6V6 is essentially cut off at -25 volts on the grid, but is still conducting current at -30 volts. For a self-bias arrangement, 240 ohms is the correct value to use for this current level. A 25 mike bypass cap across the resistor will give you low degeneration down to reasonable frequencies for speech

Now, if you want to reduce drain on the power supply, reduce heating, and so forth, you can bias the tube down as far as about -16 volts and still run class A at modest power output levels. This will still be genuine class A operation at audio drive up to 10 volts peak-peak. Anything between is a compromise, and generally gives quite acceptable performance for the type of listening a communications set is used for. Push-pull class AB1 is generally set up with around -17 volts of bias, giving I_k per tube around 34 ma., zero signal.

Class B operation of a pair of 6V6's is with about -21 volts bias. If you run a single-ended tube that way, you are going to get wall-to-wall distortion. Remember that a tube does not cut off suddenly, like a transistor, and as I mentioned, a 6V6 still has transconductance between -25 and -30 volts, but it falls off so badly that you are going to see tremendous lopsidedness in the output current waveform between positive and negative current peaks.

One way to linearize the output is to remove the cathode circuit bypass cap, which essentially puts the transconductance of the tube in series with the conductance of the resistor. This is a standard AA5 gimmick, however, you will want to remember that the transconductance of a 50L6 is much higher than a 6V6, and the cathode resistor used is typically 150-180 ohms. The unbypassed resistance gives degeneration, so you need enough additional audio drive to compensate. The typical 6SQ7 drive circuit only has about 30 volts of headroom in the usual zero-bias detector/avc/audio amp circuit, so if you need more audio drive, you need to rig up something else.

So far as voltage charts in Sams and Rider manuals go, I sometimes wonder if these measurements were taken with a roulette wheel instead of a voltmeter. On a single-ended beam tetrode circuit, cathode current should be between 40 and 50 ma. zero signal, whether the tube is a 50L6 or a 6L6. Things don't change until you get into the 807/6146/813 class. If it is very far different than that, you are going to get distortion and/or red-glowing plates.

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Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
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From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: "michael ferraro" <ferraro@ix.netcom.com>
Subject: 75A-1 problems
Message-ID: <199701060508.VAA28304@dfw-ix2.ix.netcom.com>

Does anyone have any experience with the following on the 75A-1

1. overall low sensitivity

2. S-meter can not be adjusted correctly: when I tried to adjust S9 = 100 microvolts, no problem but I had to adjust the zero pot to obtain the correct dynamic range so that the needle swung from the noise level of around 2 db to the S9, 100microvolt range.... but because i had to use the zero pot to get this range, the needle slammed (i bent it somewhat !!) into the zero position when I switched to the filament position.....when the zero pot was adjusted correctly (that is it reads zero when switch is in filament position) then S9 still = 100 microvolts but no signal reads about S7.

When I first opened up this receiver....I was amazed.....what a mess.....filament wires are charred and crumbly.....terrible

soldering.... I am trying to convince myself to start at the rf amplifier and rebuild the darn thing !!!

any help would be appreciated

73's de Mike , k6zsr

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: Bob Duckworth <WB4MNF@atl.org>
Subject: A real boatanchor?
Message-ID: <01BBFBE9.F94BD970@office>

R390A contract number 8719-P-55 sn45 arrived via the greyhound yesterday.
It appears to have been used as an anchor.
The radio was full of fine silt and still wet in places.
I'd estimate about 2 lbs of mud rinsed out of it.
The smell brought back childhood memories of fishing in the bayou in La .

The good news.
It's missing a knob, and the tools. (add to hamfest list)
The modules appear to be original to the radio.
There is no rust.
It's a Collins (is this good news?)

Went hunting for the 390 contract info but forgot where it lives.

The main reason I got this was to have something to look at
after tearing apart and cleaning up the EAC 390A so as to
be able to reassemble it. A bit of 3-D to help understand the
manual drawings. As it was/is wet, I'll be tearing this one
down first. Any major caveats before digging :-) in?

-bob
wb4mnf@atl.org

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: n5off@w5ddl.aara.org
Subject: Admiral (BA Radio Maker)???

Message-ID: <548128@w5ddl.aara.org>

Can someone help me with my research of the Admiral Company, the part that made BA gear?

I know Admiral acquired some electronics businesses from Raytheon in the early days, and then later sold out to Maytag.

Q: Where were the mil BA's made, and what company acquired the business?

Maytag (you know what they make) knows nothing about any of this, at least not the 18 year old at the switchboard :-)

Anyone know what became of Admiral?

Were they in Indiana at all?

73 de tom

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997

From: Bob Roehrig <broehrig@admin.aurora.edu>

Subject: Re: Admiral (BA Radio Maker)???

Message-ID: <Pine.ULT.3.95.970106190140.17531C-100000@admin.aurora.edu>

On Mon, 6 Jan 1997 n5off@w5ddl.aara.org wrote:

> Can someone help me with my research of the Admiral Company, the part that
> made BA gear?

>

> Anyone know what became of Admiral?

I dunno what happened to them, but I had an Admiral TV in the 60's. It was my first color set - full of tubes. Had one of those round metal pix tubes. Set was real reliable as long as you replaced all the "BIG" tubes once a year (deflection amps, damper, and rectifier).

I know Admiral made radar gear too.

E-mail broehrig@admin.aurora.edu

73 de Bob, K9EUI

CIS: Data / Telecom Aurora University, Aurora, IL

630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997

From: beyer@eceserv0.ece.wisc.edu (James B. Beyer)

Subject: Re: Antenna Design Software

Message-ID: <v02110101aef664a53336@[144.92.209.194]>

>

>OK, here we go. The Beverage antenna has become the premier receiving
>antenna for serious low band ham DXers and also SWL's down into the BC
>band.

>I am using Slinky toys for that antenna! At this time, my best ever
>European Beverage is 5 Slinkys in series, 10' above the ground, and
>stretched over 175'. It is extremely quiet and the S/N ratio is better
>than a traditional Beverage 750' long.

>

>My problem is how to model it.

>Is there anyone willing to look at this and develop the setup parameters
>necessary?

Carl,

I think you are trying trying to crack the proverbial walnut with a sledgehammer by using moment method techniques for this problem. I would suggest that your antenna is just a loaded transmission line and a classical calculation of the inductance per unit length and the capacitance per unit length will yield all you need to solve the problem. At ten feet above the ground plane this should be easy to approximate. $(L/C)^{1/2}$ will give the terminating resistance and $(LC)^{-1/2}$ will determine the phase velocity and hence the electrical length. The radiation pattern and other antenna properties should be essentially those of an ordinary Beverage of the same ELECTRICAL length. The slinky will be lossy but again classical calculation using the peripheral length and including skin effect should determine the loss resistance per unit length. This loss may be contributing to the "quietness" but depending on the type of noise and where it is coming from the reduced physical length may also be a factor. It's a clever idea but I expect it's been done before, I wouldn't be surprised if Beverage himself tried one. (probably not with a slinky)

73,

Jim Beyer W9ADJ

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997

From: "Douglas M. Gordon" <dmgordon@electriciti.com>

Subject: B&W 80 TVL

Message-ID: <1.5.4.16.19970105210933.1dbf2898@electriciti.com>

Greetings Fellow Coil Winders,

Please enlighten me regarding specs on the famous B&W 80 TVL. Total turns, wire size, winding pitch, etc?? Mine looks modified and cooked. Also I probably wouldn't pass on an offer to sell me another either.:+) Thanks and a belated Happy New Year to all.

73,

Doug K6PUN
Carlsbad, CA 92008 (another good idea, Gene)

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Mike Warren <71555.713@compuserve.com>
Subject: BA's for sale
Message-ID: <199701060818_MC1-E4A-34D6@compuserve.com>

Hi Firebottle lovers,

(Not sure if this is appropriate, but sure Jack will let me know if not . . .)

Heard these "for-sales" on a MN 80-meter swap net Sunday:

DX-60 w/HG-10 - \$100 - Jack, 612/881-5737
EFJ Pacemaker - \$250 - Mark, 414/434-8097
EFJ Challenger - \$50 - ditto
EFJ 6N2 - \$25 - ditto
NC-57 - \$100 - ditto
SX-101mkIII - \$125 - ditto
Hallicrafters "LOUDENBOOMER" - \$375 - ??, 218/865-6541
B&W L1000 Amp - \$350 - Skip, 507/452-4989
HRO-7 - \$250 - ditto
Harvey Wells T-90 - \$?? - Bruce, 715/344-9099
Globe King 400 "Collector Quality" - \$1500(!) - Jim, W0NKL (didn't catch phone#)

Please let me know if this kind of info is desirable/appropriate for the list. If so, I'll try to post every Sunday evening (or early Monday).

73, Mike

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: KA9EGW@aol.com
Subject: BC221 as a vfo
Message-ID: <970106171801_2088541254@emout07.mail.aol.com>

Have several of the little beasties--converted one a while back to use as a vfo to drive a Viking 2. The conversion was simplicity itself--find the audio choke between the detector and the audio amp--typically 150, 300 or 450 Henries bypassed by a .02 depending on what version of BC221. Lift one end of that .02 (removing the rf bypass around the choke). Now add a .02 from the hot end of the choke to the output jack you've cleverly installed in one of the old headphone jack holes, equally cleverly taping up the headphone jack and tucking it inside the unit.

Takes about 15 minutes. Drove my Viking to full input on 160 and 80 just fine. To get enough grid drive to the Viking's finals for 100% modulation on AM, I'd add a buffer between the '221 and the Viking. Ran the '221 off a slightly modified Heath HP23B (lifted one of the LV supply's fullwave diodes to get halfwave rectification and a consequent drop in the low HV bus to 150V.

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: Re: Coax vs Open Frame Relays
Message-ID: <Pine.SUN.3.91.970106075618.6979A-1000000@indy1>

Hi!

> On Sun, 5 Jan 1997 km1h@juno.com wrote:

(A nice discussion of the use of conventional vs. coaxial-style relays at HF, deleted here for brevity)

>

To that end and on that same day, Bob Roehrig asked:

> What if you use a DPDT relay and use the 2nd set of contacts to short
> the rcvr line to ground during xmit?

It works! :) One can often get better isolation by using two relays, shielded from each other--a SPDT to do the "transfer" switching and an SPST to short out the receiver input. The shorting relay should be close to the receiver input. There are all sorts of ways to get better isolation--consider the open set of contacts of the double-throw transfer relay as a small condenser and it is obvious that picking a relay with low-C design helps, as does adding another relay to open up the connection between the transfer & shorting relays.

One way to go is a pair of double-throw relays--one transfers between receiver and transmitter, the other switches the receiver input between the "receiver" port of the transfer relay and ground. With some attention to hookup, the capacity coupling on the receiver relay is to *ground.* Even as non-ideal as ground generally is, this is helpful.

There's a price, of course. All these schemes make the impedance "bump" even worse. With a little care, it is not significant up to 28Mc or so, precisely as Carl said.

Back when I was a Novice (and the Handbook was bound in dinosaur skin), one of the other local beginners used a plain old octal-based relay, without sheilding, switching between his Hammarlund and one of the simple 75W rigs of the day. It worked fine--and that type of relay does **not** have low-C between open contacts! So super-duper isolation is not always needed.

Another handy trick with low-Z receiver inputs is to use a couple of back-to-back semiconductor diodes (we used to call 'em "crystal diodes") at the receiver input, which will clamp the P-P voltage there to whatever the forward drop of the diodes is. An older trick is to bias a neon lamp to do the same thing.

Bob Keys wrote awhile back of the "simplest TR switch," which uses a very small coupling condenser between receiver and antenna, and a back-to-back diode clamp on the receiver input. It's not for the high-power set but it's fine for small fry. (Limiting factor? Breakdown voltage of the diodes and one's faith in physics vs. the cussedness of the universe!)

73,
--Bobbi

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: Cal Eustaquio N6KYR <ceustaqu@dot.w6bhz.calpoly.edu>
Subject: Collins 75-A2 sitrep and finale
Message-ID: <Pine.SUN.3.91.970106095612.8317A-100000@dot.w6bhz.calpoly.edu>

Just before the holidays, I manage to get one last strike at my restoration before becoming ill with the flu (imagine trying to troubleshoot TVs while hacking and sneezing. Not fun at my job too). That AVC problem I mention before turned out to be an open switch contact. The AVC amplifier was not in line with the rest of the line. Apparently, it acts as a shunt to the AVC line whenever a signal of substantial proportions come in. When I measured the line with a high Z DVM, voltage excursions on when as high as almost 50 volts or so with strong signals in. I corrected the problem by "shlurking in" some of that fantastic DeOxit D5. Unfortunately, that only solved part of the problem. You have to jiggle the mode switch in order to get the contact in line. As time and usage goes on, that problem becomes less and less manifested. A quick switch from AM to CW and back to AM usually solves the problem.

I found the problem by making a voltage check on all the tubes (using the tube voltage chart found in my manual copy). Sho' 'nuff, the AVC amp plate had nil, nada, zilch, zero voltage as opposed to the requisite -1.5 volts (quiescent state). The AVC detector and all else connected to that AVC line had the requisite voltage. Test run with WA6HDY (about 20 miles away) on 3870 showed that my 75A2/32V2 setup worked well! Now, I gotta

finish up my senior project documentation. Incidentally, I put up all my Collins rigs on one spot (my grey line on top with the 75A4, 75A2, 51-J4, and 32V2 stacked accordingly) on a hutch over my S-line. Can't wait to send a pix to Barry when he puts "his station is mostly COLLINS" caption at the bottom. Thank you all for your help on the matter. Two pieces of former junk have reclaimed their rightful place among the living, "firebreathing" BA's. Cal, N6KYR.AMI #537.

"Airborne--All the Way"
"Armor--On the Way"

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Steve Ellington <n4lq@iglou.com>
Subject: Re: Collins Antenna?
Message-ID: <32D13153.6515@iglou.com>

Al Klase wrote:

>
> The 15th edition ARRL Handbook (1938) shows construction details for
> the "Collins Multi-band Antenna System". It is a center fed Zepp with a
> 300ohm balanced feeder. A table suggests several combinations of antenna
> and feed-line lengths including one antenna of 103 feet that does 80, 40 and
> 20 meters and strikes me as the granddaddy of the G5RV. A 300 ohm feed line
> was quite unusual in those days, and the suggested construction was 1/4 inch
> copper tubing on 1.5 inch centers. A tuner was required.

WELL FINALLY!!!!

Now that we have discovered the antenna. Did Collins ever manufacture this thing? If not, why not? Did they make or recommend a tuner for it?

Steve N4LQ@iglou.com

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: MEC <danmec@inet.uni-c.dk>
Subject: Re: Collins Antennas
Message-ID: <Pine.3.89.9701060955.A4364-0100000@inet.uni-c.dk>

I believe these were all made by Hy-Gain, just private labelled.

Anyone knows ?

73 Rag OZ8R0

On Sat, 4 Jan 1997, Tim Richardson wrote:

> At 10:36 PM 1/3/97 -0600, N4LQ Steve wrote:
> >I'm trying to find some info on a dipole antenna made by Collins. Seems
> >like it was some kind of wide-band or multi band arrangement. I know
> >they made a dipole for portable use that worked like a tape measure reel
> >but that's not it. Didn't they sell a fan dipole or one made for use
> >with a tuner?
>
> In addition to the TD-1 tapemeasure dipole you mentioned, Collins also made
> two models of dipole antennas that had built in baluns, the model 637T-1
> covered 2 to 30 Mc and 637T-2 covered 3.4 to 30 Mc
>
> Tim Richardson WB4HZT Acworth, GA <tim@america.net> <http://www.america.net/~tim/>
> "Those who cannot remember the past are condemned to relive it."-Santayana
>
>

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997

From: Paul Bernhardt <bern@ppdu.nrl.navy.mil>

Subject: Counting Tube Information Needed

Message-ID: <Pine.A32.3.91.970106163901.24180B-100000@ppdu.nrl.navy.mil>

Experts,

I would appreciate getting data sheets and hookup diagrams for the following counting tubes:

6910 by Sylvania

6476 by Sylvania

GC 10 B by Baird Atomic

GC 10 D by Baird Atomic

GC 12 4B by Baird Atomic

GS 10 C by Etelco Ltd.

I have these tubes and sockets but don't know how to wire up a test circuit.

Paul Bernhardt, KF4FOR

5704 Ridge View Dr.

Alexandria, VA 22310

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997

From: don merz <71333.144@CompuServe.COM>

Subject: Damn Trivia!

Message-ID: <970106183805_71333.144_DHB47-2@CompuServe.COM>

Silly Trivia, but what the hell--it's a bold new year!

The first widely made screen grid tube type number was? Another term for screen grid used at the time was? Because it had a new element, the new type initiated a new class of types called?

Was there ever a hollow-state equivalent of an integrated circuit with caps, resistors and tube elements all in one envelope? If so, when was it introduced? By what manufacturer?

GIMMIES: "Radio's Greatest Magazine" was? "Radio's Livest Magazine" was (no, that's not a typo...)? Who edited both of these magazines?

Answers Tomorrow.

73, Don

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997

From: wally@mindy.sys.sdl.usu.edu (Wally Gibbons)

Subject: E. R. address/phone #

Message-ID: <9701061803.AA03705@mindy.sys.sdl.usu.edu>

HI.

I want to subscribe to Electric Radio Mag.

Have searched for the address/phone number in places in the archives

I thought it may be.

No luck.

Could someone e-mail the phone number/address?

Many thanks.

Wally Gibbons

wally@mindy.sys.sdl.usu.edu

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997

From: lkayser@rideau.net (Larry Kayser)

Subject: ELT's today, the amateur radio connection

Message-ID: <199701061952.0AA24098@mail.peterboro.net>

Greetings:

The query...

>Are hand cranked emergency lifeboat radios still used?

>

>A few years ago, a Stonington commercial fishing boat was lost in a
>winter storm. The unsuccessful search for survivors lasted many days.
>....Hopefully, the new ELTs incorporate a handheld GPS receiver so they not
>only can act as a beacon, but also can transmit their exact position!

It is a stretch for boatanchors (the ground transmitters of the day were all tube type however) but there is no need for hand crank ELT's today. There is a service known as SARSAT in which amateur radio in the mid 1970's played a very large part in making it work.

If an ELT goes off anywhere in the world within a few hours a SARSAT package on a low earth orbit weather satellite will find the elt and relay the elt signal to a ground station. The ground station will process the signal and resolve the location within a few kilometers. Recovery can be very quick, but more on that later.

When OSCAR VI was doing its thing in the 1970's I was approached to run some tests through the satellite. Some neat DSP types had found a way to resolve the ambiguity of figuring out which side of the satellite flight path the ELT was to be found based on a quirk in the doppler shift. We ran many tests, me slipping out of my office and going home for 20 minutes to put OSCAR VI on the air for a short test, usually mid morning. Finally the big day came, a demo was to be made to a large collection of General staff officers. The guy who was playing the beacon was driving in a car in Northern Ontario and the day before he had a good signal and they had resolved his location excellently.

The next day, I slipped the satellite ON, the beacon was there and they took their measurements and I shut OSCAR VI OFF. I jumped in my car and went to the demonstration site to take part in the festivities and when I arrived a bit less than an hour later there was a sad state of confusion. The beacon had been computed as being in Northern Saskatchewan some 600 air miles from the Ontario location, almost on the wrong side of the satellite ground track!

The beacon operator called in by long distance telephone on schedule at noon. He was quized about any problems he was having, to which he asked if there was anything wrong. He was told that the beacon was located by the system as being in Northern Saskatchewan. He replied that that was correct, he had driven all afternoon and all night (700 plus road miles) so as to provide a real test of the SARSAT system concept. He then put the local mayor of the town on the phone to talk to the assembled group.

The SARAST concept was proved valid, the ambiguity problem of resolving which side of the satellite ground track was the real and imaginary beacon solved.

Early in the days of the first operational spacecraft with SARSAT on board a chap who crashed on take off in an isolated lake was rescued. He was a relative of one of the chaps who helped me build the 435.1 Beacon for OSCAR VII. Later he brought his recovered relative to visit one night, it was a great feeling to have shared in running those tests and to meet someone who directly benefited.

I do not think we have a need for hand cranked ELT's.

The idea of a gps connected to an ELT sounds great, I am sure it exists by now.

The command transmitter I used for commanding OSCAR VI was an ex GE 330W output lowband FM rig. I built a new strip line amplifier for it for 144 MHz. I had problems getting OSCAR VI under control over Europe and I fried a few final tubes. Bill Eitel, W6UF, of EIMAC brought me some 4CX250R's to an AMSAT meeting and I put one in service. Then I put in a screen supply that was switchable between +255 VDC and +900VDC only for the duration of the Command sequence, about 75 Milliseconds. I did not have an accurate way of measuring the new pulsed power output, my estimate was about 1300W output. From then on I had very solid control of OSCAR VI anywhere, even for passes which the then computer programs suggested were just below the horizon. Moral of the story here is if you see 4CX250R's grab them, they are really tough tubes.

Larry
va3lk / wa3zia

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: w2ec@VNET.IBM.COM
Subject: For Trade/Sale: R-1051B 2-30mc receiver
Message-ID: <199701061435.IAA04274@uro.theporch.com>

I have one of these receivers that I got as part of a package deal. It is too modern for my interests, but due to weight and the fact that it contains two tubes (and oddles of sand stuff) I figure it qualifies as a BA. Check the WS-96 Fair catalog if you want a picture of one. A picture can also be found at <http://telalink.net/~badger/millist/pic/r-1051.jpg> It covers 2 thru 30mc with each digit individually selectable down to 100c. There is also a variable switch position that lets you switch from the detented 100c/200c/etc switch to a full variable 0 to 1kc if you need fine tuning in less than 100c increments.

The rcvr covers CW/LSB/USB/ISB/AM. The front panel is near perfect, no marks, all knobs/meters/lamps/switches OK. Case is great, just a few scratches from normal wear and tear. 115VAC 48 to 400 cycle PS built in. I'd classify this as Fair Radio's version of Used/Checked. I've powered it up (non-original line cord), received stations with it, all motors (motors drive the Mc tuning) and tuning chains are intact and functioning. Internal condition is near factory new, clean, no dust etc. Well sealed unit. For those into mechanical stuff, the 100/10 and 1 KC controls interface with the actual tuning components via a set of minature bicycle style chains to provide linkage. Real neat! The only known problem is that the 100kc switch appears to be intermittent. It is a combination rotary wafer switch and bicycle chain linkage and needs to be wiggled quite a bit to get the radio to function. Signals start out very weak, almost non-existant. Wiggling the 100kc switch will cause the signals to suddenly come up full strength. Changing any other frequency switch again causes the signal strength to drop out and you need to wiggle the 100kc switch again to get it working. This seems to be a mechanical problem (dirty switch contact on the rotary wafer? Bicycle chain slipping or jumped a tooth?).

I don't have a manual for this radio and have too many other radios of the type I'm interested in (WW-II Navy or Collins) that need work to pursue this one. I've only checked it out to give a perspective trader/purchaser an idea of what condition it's in. With the intermittent 100kc switch I do not represent the radio as 100% full working condition. But with a little wiggle, it seems to work great.

First off, I'm more interested in trading for something. My primary interest is locating a Collins 51J3/R388/51J4 receiver. I'd also be interested in a 75A series rcvr, 32V or 32S series xmtr or 30L1 amp. Additionally I'm interested in WW-II Navy L/HF receivers/transmitters. I have a special need for an RBA LF rcvr w/ps. I'd also be interested in a TCS rcvr/xmtr combo.

If you don't have anything to trade but are interested in the R-1051B anyway, make an offer.

Please contact me direct if there is any interest.

73, Ray W2EC w2ec@vnet.ibm.com

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: jkh@lexis-nexis.com (John Heck)
Subject: FS: ART-13 Manual
Message-ID: <9701061744.AA12173@beans.lexis-nexis.com>

Folks,

I picked up the following over the weekend:

The following three original issue manuals:

"Handbook of Operating Instructions For Radio Transmitting Set AN/ART-13, AN/ART13A, and Navy Model ATC and ATC-1", AN 08-30 ART 13-3

"Handbook of Maintenance Instructions For Radio Transmitting SET AN/ART-13A", AN/16-30ART13-4

"Radio, Radar and Electronics Spare Parts List For AN/ART-13, AN/ART-13A, ATC, ATC-1", T.O. No. 16-55-61

These three manuals have been neatly hard bound by a commercial bindery in Hamilton, Ohio, and are in excellent condition. They appear to be complete and contain numerous photos and tipped in multi-sheet schematics and block diagrams, etc. The name and address of the former owner is written on the obverse front cover. The manuals seem to have been individually de-classified in 1947, and are original.

I do not have an ART-13 but thought they might be of some interest to someone in the group. I had to give an arm and a leg for them and so must offer them for \$50 plus postage. Please reply to my private email address below. Thank you.

Regards,
John Heck, KC8ETS
1009 Donson Drive
Dayton, Ohio 45429
(513)865-7036(work)
jkh@lexis-nexis.com

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: aculbert@pps1-po.phyp.uiowa.edu
Subject: FS: DRAKE 1-A
Message-ID: <199701061723.LAA22503@ns-mx.uiowa.edu>

As a result of a "package" purchase I have a Drake 1-A receiver for sale.

DRAKE 1-A ham band (80-40-20-15-10 meters) receiver, serial number 696

THE GOOD NEWS:

Radio works, I copied signals on 80, 40 and 20. S-meter seems pretty "scotch",

but made no effort to check tubes or do any alignment or adjustments.
It is the model WITH 10 MHz WWV and 100 kHz calibrator
Includes the original manual
Panel, dial, S-meter and glass are in very good condition
Cabinet is in good condition (no extra holes, no dents, no rust), some minor
scuffs
NO APPARENT modifications of any kind

THE BAD NEWS

The tuning knob is NOT correct. Originally, the 1-A had dual concentric knobs
with the smaller knob driving a 6:1 vernier drive. A "spinner" knob has been
installed. The vernier remains and is driven by the "spinner" knob.

The chassis top has several areas of corrosion (common problem with the copper
plated chassis used by Drake when stored unprotected). However, the under
chassis is like new.

If you are a purist and are seeking a MINT 1-A, this is NOT the radio for you.
If a 1-A that looks good and has the wrong tuning knob, but works will suit your
demands, then this MAY be for you.

TERMS

I will double box and ship via UPS ground to the highest reasonable offer
received by 4:00 PM CST January 8, 1997. Shipment to be made after receipt of
payment.

For reference in estimating shipping costs, the radio weighs 18 pounds and my
postal code is 52402

Al, K0AL

allan-culbert@uiowa.edu

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: ads@mhcnnet.lucent.com (Alex Schapira)
Subject: FS: real old stuff, National coils
Message-ID: <9701061813.AA29747@work>

All,

Here is some real old stuff which may be of interest to B-A collectors.
I don't expect to be swamped with offers for this stuff. If there is
no interest, I'll try rec.radio.swap next.
Best offer and/or story by 1/10 gets it. You pay postage.

2 National coils. Phenolic cylinders 3" x 1 3/4" dia, 6-pin base.
Black (anodized?) metal front with finger pull ring.
One labeled "DET 3.5-4.0 MC", the other unlabeled.
fair-good

1 Military Microphone T-17
Aluminum with SW-109 push-to-talk button, 5' rubber cord with R,W,B leads.
fair

Acme Trimm Inc Headphone (single)
with headband, leads with pin tips.
good

Wigginton Voltage Tester [Square D Company]
Spring loaded voltmeter!
Metal cylinder with 2 probe leads
Scale markings for 110, 220, 440, 550 AC; 125, 250, 600 DC
fair-good

Coastwise Electronics Co, Model 730 Signal Tracer, serial 10013
Volt-Ohm-Meter with a 7" x 8" meter
fair-good appearance

Weston Model 772, Type 6 Super Sensitive Analyser
with manual, Wooden box
There is a picture of this unit in one of the
"How to repair old radios" books.
poor

You won't insult me with your offer. Please go ahead and make one.

-Al
schapira@lucent.com

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: jkh@lexis-nexis.com (John Heck)
Subject: FS: Unbuilt Heathkit IT-28 Cap Checker
Message-ID: <9701061432.AA12012@beans.lexis-nexis.com>

Folks,
If you guys are anything like me, I suppose most of you are pretty much tapped out after the Holidays. I will make the following offer, though, with the hope that some one may find this too much to resist. I have picked up an UNBUILT Heath-kit IT-28 Capacitor Checker. It appears to have never been unpacked and is still

in the original box as sent from Benton Harbor. The outside cardboard shows some moisture damage but the contents are absolutely like new. I removed enough of the contents to make sure all the paperwork was still there and it was complete. I am sorely tempted to build this nice piece but I would really rather someone who collected unbuilt Heaths to have it intact. It is one of the models which still used

all tubes and employs a 6E5, I believe, magic eye tube, as an indicator. I had to put out a good bit to pick this up so I am having to ask more than I would like, but

I will let it go for \$80 plus shipping, and I'm sure I can ship it for about \$7 to any CONUS location. If you're interested, please let me know via private email.

Thank you.

Regards,

John Heck, KC8ETS

1009 Donson Drive

Dayton, Ohio 45429

(513)865-7036(work)

jkh@lexis-nexis.com

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997

From: dr.electron@juno.com (Richard L Paton)

Subject: GE Maggie

Message-ID: <19970106.012146.11910.2.dr.electron@juno.com>

Hi Jack

Does it look like X band.....?

MIT Lincoln Labs & GE Heavy Military Electronics Division

(Syracuse N.Y.) had big production on the Mod 6 & GERTS

Radio Guidance systems, c. 1957 on, ... at around 9.220kmc...was

mucho classified. OR

Naval stuff?.... OR

OEM? ?????

Any additional numbers? I could call "spock" about this. (Our Gerts GURU)

What are the waveguide flange dimensions?

I vaguely remember freq. dial readings at the fine tuning shaft....had motorized AFC !

Anything like this?

Rich P

" Sputnik panikum fundus nonlimitus "

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997

From: Richard Post <POST@ouvaxa.cats.ohiou.edu>

Subject: General Radio 1650-B need manual

Message-ID: <A4749ZWQPOVYDQ*/R=OUVAXA/R=A1/U=POST/@MHS>

Yes I know that the 1kHz oscillator is made of 3 legged devices, but couldn't resist this beautiful GR piece, complete with its rack mount surround. Pulled out a sealed 400 ohm half percent resistor and found that this bridge read it at 400. Similar results with a 1% 5100 mmf cap. I assume this is a late 60's version of the venerable 650. Need to know more about this piece.

Anybody have the 1650 manual and photocopier access? Have a number of manuals for copy trade or will reimburse the usual copying and postage.

Thanks and 73,

Rich KB8TAD Keeps Buying Tube Active Devices <rpost1@ohiou.edu>

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: k9gdt@juno.com (George P Sieverson)
Subject: Re: General Radio 1650-B need manual
Message-ID: <19970106.172508.10230.1.K9GDT@juno.com>

On Mon, 6 Jan 1997 16:25:57 -0600 (CST) Richard Post
<POST@ouvaxa.cats.ohiou.edu> writes:

>Anybody have the 1650 manual and photocopier access?
>Thanks and 73,
>Rich KB8TAD

Hi Rich,

I can send you a copy the manual for my GR 1650-A.....Don't know about the differences, so I'm copying the entire list, confident that someone can comment on the suitability of the -A manual for servicing the -B instrument.

If you can use the -A manual, just let me know where to send it.

Cheers 'n beers,
George

George Sieverson
Barrington, IL
K9GDT@JUNO.COM

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997

From: John Shriver <jas@shiva.com>
Subject: Re: General Radio 1650-B need manual
Message-ID: <199701062354.SAA15348@shiva-dev.shiva.com>

I think that the difference between 1650-A and 1650-B is essentially that the B has the new knobs, in the two-tone dove grey scheme. There really wasn't much to change (improve on). But, I don't have both manuals to compare.

The dove grey scheme is pretty, but the knobs just aren't as durable as the old ones. The little latching clips are fidgety.

All my 1650-A needed was a little switch cleaning. (Also learning how it works, took a while to figure out that the Null meter was center Null for DC, and minimum reading for AC.)

Well, they all could use new battery tubes and battery terminals! The D-cell batteries will leak someday if you ever leave them in...

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Rodger Singley <rbsingl@rs6000.cmp.ilstu.edu>
Subject: GSB-100 caution and needs
Message-ID: <9701061637.AA14038@rs6000.cmp.ilstu.edu>

I recently completed the electrical restoration on one of the two GSB 100's I got from Mike K0AZ (thanks Mike!) and found an interesting problem in this unit which is a good preventive maintenance idea for other GSB100 units. During the first power up (with Variac) a 100 ohm 1 watt resistor feeding the plate of the 12BY7 driver began smoking. I suspected a leaky bypass cap to ground but didn't find one-however closer examination of the trimmer caps used to tune this circuit (neither side of which is at DC ground) revealed the problem. The rotor of these trimmers is at +270 and they have a metal ring which is part of the rotor covered by a very (very) thin layer of ceramic which easily contacts the metal plate in which they are mounted. Two of these were arcing with carbon paths. I remounted all three of these trimmers on spacers to lower them a safe distance from the mounting plate. It would also be possible to enlarge the mounting holes for these caps but my solution is less "obtrusive". The other trimmers used in the stages leading up to the driver stage are not a problem since the rotors are grounded.

It seems the major problem on both of these units is the power transformer. I am using old TV set transformers for both units with 300/0/300 HV secondaries with a bridge rectifier for B++ and taking low B+ off of the center tap. Bias supply is obtained by using a separate 6.3V filament xfmr connected in reverse (and concealed under the chassis). All of these changes are easily reversible. Not original but finding an original Gonset xfmr which works is not easy (the originals are also sort of small

considering the load they were carrying). Seems to be a lot of "dollar" engineering in Gonset equipment!

After alignment this unit is developing about 50 watts on all bands with "okay" sideband suppression (but a little arcing on 75 so I need to investigate this). This seems to be sort of a transition piece in the US boatanchors given that many of the more expensive mechanical parts (large variable caps, meter) are marked made in Japan.

By the way, if someone has a parts GSB100 I could use the following parts:

The little Gonset emblem which mounts below the VFO dial.

A gonset spinner knob (or just the spinner part or hints on how to make a replacement spinner!)

Thanks and best wishes,
Rodger WQ9E

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: Chuck Penson <penon@sci.mus.mn.us>
Subject: Handbooks FS
Message-ID: <32D15B1F.70E9@sci.mus.mn.us>

A while ago I put some ARRL handbooks up for sale. Several where claimed but never paid for so I am reposting them now. Prices and conditions as noted:

Year	Condtion (1-10)	Price	Notes
1948	8	\$15	
1959	5	\$8	"Howard C Pew" wrote is name on the cover. Binding a bit tattered.
1974	9	\$15	
1977	8	\$15	
1978	9	\$15	How did I end up with *three* copies of this year?

I figure it will cost \$2 each to ship (book rate).

Cheers,

--
Chuck Penson
WA7ZZE

person@sci.mus.mn.us
612.221.4510 voice
612.224.5092 fax
<http://comped.sci.mus.mn.us>

Standard Disclaimer: The opinions expressed are etc. etc. ...

"Nothing is too wonderful to be true" -- Michael Faraday

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Guy Dragoo <gdrag@proedge.com>
Subject: Heathkit IC replacement
Message-ID: <01BBFBB4.3062FFA0@ft255.computek.net>

I have a Heathkit SB-104 Transceiver that has "lost" its' display but functions fine otherwise. The unit uses a voltage regulator that is apparently no longer manufactured by Motorola (used for the 5v circuit). The number on the chip is M7652 (6 pin IC, with center leg extensions with a Heathkit part number of 442-48) and is listed in the manual as a MFC6030. This IC is on the "B" board for any Heathkit aficionados if that helps any.

Does any one have an extra one of these chips or know of a suitable replacement?

Thanks and 73

Guy

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: km1h@juno.com
Subject: km1h: Re: Coax vs Open Frame Relays
Message-ID: <19970106.172158.3239.8.km1h@juno.com>

Must be getting Alzheimers...forgot to copy this to the great unwashed multitude this morning.....Carl

----- Begin forwarded message -----

From: km1h
Subject: Re: Coax vs Open Frame Relays
From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: billo@nti.net (Bill Wilson)
Subject: KWM2A crystal needed
Message-ID: <19970107005603602.AAA183@LOCALNAME>

My friend Ray needs a 75 meter crystal for his Collins KWM2A. He needs the 3.8-4 crystal, he has other crystals to trade.

His phone is 205-820-5486

Either call him or leave me a message email.

Regards,

Bill
AC4LC
Jacksonville, Al.

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: John Shriver <jas@shiva.com>
Subject: Re: Light Sensitive 6SL7 !
Message-ID: <199701061604.LAA21300@shiva-dev.shiva.com>

Someone had probably gone into serious grid current once on the "gassy" side of that 6SL7. That probably caused some cathode coating material to get onto the control grid. Thereafter, that side would be MUCH easier to send into negative grid current (emission). (After all, cathode coatings are designed to emit electrons.) I suppose that a little light would make that grid happier to emit, especially the high-energy UV light from a flourescent light.

Remember, tube testers don't measure gas, per-se. They measure negative grid current (emission).

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: the-radio-doctor@juno.com (Rob D Long)
Subject: RE: Milwaukee are HamFest
Message-ID: <19970105.111739.9070.0.the-radio-doctor@juno.com>

Will any list members be in attendance at the Jan. 12, Waukesha fest hosted by West Allis Amateur Radio Club?

73 Rob

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: k0az@i1.net (MIKE SANDERS)
Subject: Need Manual for Johnson Courier Amp
Message-ID: <199701062152.PAA06270@mail1.i1.net>

Greetings All,

One of the fourth rarest Johnsons arrived today in good shape. I knew it had no manual with it. So my plea is here for a manual. Obviously will pay. Anyone who might have an original (yeah right!) could trade me out of an even rarer Johnson original manual or other original manuals or get into my back pocket. Paint scrapes on the top front and a few marks on the cabinet. Otherwise original and in very nice condition. Over time I will have it looking like the Ranger it will join. This completes a five year long look for. Dream on? You betcha!

73, Mike K0AZ

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997

From: w2ec@VNET.IBM.COM

Subject: Re: New End Table/Modern Gibson Girls?

Message-ID: <199701061321.HAA01071@uro.theporch.com>

>Hopefully, the new ELTs incorporate a handheld GPS receiver so they not
>only can act as a beacon, but also can transmit their exact position!

The new ELTs incorporating this feature are already in the works.

I'm a search and rescue mission pilot with the Civil Air Patrol and have flown many missions "DFing" an ELT signal from a plane. Currently we are usually notified by the Air Force Rescue Coordination Center that they have picked up an ELT signal from a satellite and we're given a rough Lat/Lon indication of where to start looking which has been calculated via "satellite triangulation" over a period of several passes of the satellite. Future versions of ELTs will uplink the Lat/Lon directly so we can start the search on the very first pass, plus we'll be much closer (right on?) the search starting point.

If anyone wants more info, please contact me direct so we don't tie up BA with this.

73, Ray W2EC

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997

From: rdkeys@csemail.cropsci.ncsu.edu

Subject: Re: Possible clash w/QRPers Feb/March

Message-ID: <9701070036.AA117622@csemail.cropsci.ncsu.edu>

Why don't all of us BA/GB types go QRP on the QRG of 3579R545 during this sprint thingie. It would give the glowbugs a time to shoot for the sky, too! Also, it would give me fine Hartley oscillator a chance ``ta shows wats it be about, again' them thar sandistateishes things wat has lost

their glow and smoke!'' (:+}}.....

All BA/GB stations take note that 0200-0300Z is QRP time on the QRG, but 0300Z and later is fine for the big boyz on the QRG, OK? This is for the period of EACH THURSDAY nite, in February and March, 1997, per below. I am sure the peanut whistles amongst us (particularly the glowebuggeite folks, will have a fine rig up fer 5 wattes de ether, byes the bye.....

The ol' ArcusFivus might even give them thar deadbug thingies a run fer their money! At 250vdc, it puts out exactly 5 o' them thar ethereal wattes!

I am sure the glowebuggites amongst the BA/GB crew can give these fellers a fine set o' logs an' shows them folkes jus' wat real radio be about! I knows fer a fact that some o' them thar QRP folkes has glowenbottles in their hearts, really, that jus' needs a tad o' careful cultivatin' an some real ether burnin' ta goes wid dat fine glow!

73/ZUT DE NA4G/Bob UP

> Bob,
>
> Picked this up from the QRP mailing list. We might change our
> schedule during the times noted, or possibly go QRP and join 'em during
> those times. I'm sending you this for your perusal and recommendations to
> the BA group on CW and the 3579.5 QRG!
> Let me know what you decide. I don't think any of our people will disagree
> to go QRP just one night a week for a couple of months. Might be time to
> get the Hartleys going!
>
> 73..
> Sandy W5TVW
> -----(
> snip)-----
> Announcing the :
>
> QRP-NE (QRP Club of New England)
>
> 79er SPRINT
> -----
>
> When: Each Thursday evening during February and March, 1997
>
> Modes: CW - Crystal and VFO Control
>
> Freq: ~ 3.579 MHz

>
 > Power Level - 5 Watts or less output power
 >
 > Time: 9:00 - 10:00 p.m. EST (0200-0300 UTC)
 >
 > Exchange - RST QTH NE#X NAME; ie.....579 OH NE404X Ted
 >
 > Members use QRP-NE number; NE404 and add X if XTAL control; NE404X
 > Non-members use Power Level; 4W and add X if XTAL control; 4WX
 >
 > QSOs are cumulative: Work the same station on subsequent Thursdays.
 > Score: QSOs X SPC. Crystal Station Bonus: Total score X 1.5.
 >
 > The 79er transmitter was NE-QRP's first club project. It uses a
 > 3579.545 kHz crystal to set the frequency. These crystals are used in
 > the colorburst oscillator of all color TV sets in the United States
 > and Canada, and in other devices as well.
 >
 > The 79er event is an on-the-air get together, not a contest.
 > Crystal-controlled stations append the letter "X" to their calls,
 > such as "KF8EE/X." Yes, it's legal. We hope this event will stimulate
 > everyone to build a crystal-controlled transmitter to use during the event!
 >
 > Send Logs to: Ted Albert, KF8EE
 > 1924 Timberidge Drive
 > Loveland, OH 45140
 > (or)
 >
 > e-mail Logs to: 72437.651@compuserve.com
 >
 > Logs need to be received by April 30, 1997. Results will be published
 > in "72". State Output Power Level, Type of Rig, and Antenna Type on logs.
 > Include comments on the event or how you built your crystal-controlled
 > transmitter for inclusion in the report in "72".
 >
 >
 > Watch out: W1AW transmits bulletins at 10:00 pm. on 3.581 MHz
 >
 > -----

W1AW ain' no probleme ta real radios wats glows in the dark, right!

Mebbe we needs ta shows them fellers wat the real ragged edge o' regeneration
 can do ta cuts down de ol Mother Station QRM. Them sandishesboxen jus ain'
 got it down, right, yet.....(:+{}.....

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: RE: Protecting receiver "front ends"
Message-ID: <19970106185307.AAA28144@LOCALNAME>

There has been some talk about antenna relays and receiver protection: i.e- preventing damage from excessive signal into antenna coils of receivers, etc.

One very common scheme is to use a pair of common diodes connected 'back to back' (in parallel) and place this combination across the antenna terminals of the receiver. Yes it does work must fine, but there is two caveats. First, a 'side effect' may be having spurious signals all over your dial especially if you live close to a broadcasting station. Not much you can do about this except a series trap tuned to the offending station's frequency. Second, if you run high power, and you use an "auxiliary" receiving antenna, maybe even an indoor one, you may eventually "blow" the diodes from excessive current. The cure here is to use an incandescent lamp in series with the antenna lead to the receiver shunted with the diodes. This can be a small lamp like a 6S6 (night lite size) or a 120MB if you want to use a miniature bayonet based lamp. Even a 10-15 watt ordinary light bulb will do if you have the space.

The idea behind the lamp is to have a place to "sink" the excess power, as when the silicon diodes conduct, they are a literal short to the source. The current will rise very quickly to exceed the ratings of the diodes unless some means is provided to limit the current in the circuit. This scheme has been used for years aboard ship where seperate receiving antennas are commonplace in the older CW installations.

You might be very surprised at how much RF is induced into a short receiving antenna inside the shack if the transmitting antenna is not too far away! Some of you high powered people with dipoles over the roof, might recall the xyl asking why the lamps in the next room glow dimly when you are on the air! The lamps are not necessary in all instances, and the need will vary from band to band. If you don't use any seperate receiving antennas you probably will never have this problem.

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"

417 Ridgewood Drive,

Metairie, LA., 70001

ebjr@worldnet.att.net

Looking for: Hallicrafters SR-75, 860 tubes

Butternut HV2V antenna, G-R test gear.....*

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Peter Ferrand <petef@sprynet.com>
Subject: Re: Purism and fuseholders
Message-ID: <3.0.32.19970106004927.00e2371c@m3.sprynet.com>

At 10:34 PM 1/5/97 -0600, Bob Roehrig wrote:

>On Sun, 5 Jan 1997, Peter Ferrand wrote:

>

>> The plug with the built-in fuse is the neatest solution, but may be hard to
>> get or expensive.

>

>Some commercial ham equipment used to come with these things. Problem is
>that both sides were fused and the plug was not polarized. What if the
>neutral fuse goes? So much for protection. I believe that these were
>"outlawed" later on.

Yes, Bob, I said *the built in fuse* - I was talking about the relatively
new plug with a single fuse, hopefully on the correct side of the line. Not
the Elmenco thing with *fuses*, two of them, that Heath et al used and that
is no longer acceptable as you indicate.

I do remember blowing both of those simultaneously in the good old days and
getting irked at having to short out, er, buy twice as many new fuses ;-)

-Pete

WB2QLL

petef@sprynet.com

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Mike Warren <71555.713@compuserve.com>
Subject: Purism and fuseholders
Message-ID: <199701060818_MC1-E4A-34D5@compuserve.com>

I'm with you, Hank -- put in the fuse holder.

I just did something similar to my AN/URM-25D signal generator. I replaced
the original 2-prong front panel power connector with a new 3-prong AC
connector/RFI filter assembly salvaged from a PC power supply. This
required enlarging the existing square hole with a saw and drilling two
mounting holes, but I feel a whole lot safer now using the sig gen with
the 3-wire power cord. I plan to do the same thing to most of my 2-wire
test equipment (and add fuse holders where necessary).

Mike

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: jproc@bellglobal.com
Subject: Re: Purism and fuseholders
Message-ID: <Chameleon.4.01.2.970106161322.jproc@>

>. Problem is
>that both sides were fused and the plug was not polarized.

Bob,

>From a viewpoint of opening up the circuit during an overload condition, it wouldn't matter which way the plug was inserted. In fact, if you have two identical fuses in the plug, there is no gurantee which one will blow first since fuses are not created equally.

>From an operator safety view point, it would also be a non-issue unless you were troubleshooting the equipment with one fuse blown, the cord plugged into the wall and were attempting to touch componets in the primary circuit.

Unrelated to the above - My Apache transmitter had a cord with the dual fuses in the plug. I remember them being 8 amp, slow blow. The RF amp had weak 6146 output tubes and if the rig was mistuned slightly, it would low the 15 amp fuse in the main fuse panel and the 8 amp fuses in the line cord didn't even know there was an overload.

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
HMCS Haida Naval Museum
Toronto, Ontario
'Looking for a 'AN/SRC-501'

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: receiver drift problems - round 2
Message-ID: <Pine.ULT.3.95.970105224227.10195F-100000@admin.aurora.edu>

Well I ran some more checks on the receiver and learned some more. No matter which coil set is plugged in, the drift is worse at the top end of the band (minimum tuning capacity). I also ran the receiver, filaments only, for one hour (just turning B+ on long enough to take a reading) and that showed that the drift still occurred but not as much as when the B+ is on. At 7MC, with B+ on, the drift was about 4.5KC in one hour. With it off it drifted 3.9KC, but then in the next 30 minutes it drifted another KC. With the B+ steady on, the last 30 minute drift actually went up 10Hz.

With the same coil set tuned to the bottom of the range (80 meters), the 1 hour drift was only 600Hz. Much better!

So for one thing - it looks like part of the drift is due to tubes heating, and part is due to RF current. With the tuning cap at minimum, the only component across the coil is the air variable trimmer. The paddler (in series with the main tuning cap) is really out of the circuit then. So it looks like maybe the biggest offender may be the trimmer cap but I thought these things were pretty much unaffected by temp changes.

More tests to run

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Dale Braun <dale.k.braun@uwrf.edu>
Subject: RTTY Roundup - BA Style!
Message-ID: <s2d0cb06.069@adngate.adn.uwrf.edu>

Folks:

Sure had fun this weekend operating the RTTY Roundup contest using my boatanchor equipment. I used a Heathkit Mohawk receiver with a Heathkit Marauder transmitter. The terminal unit was, alas, solid state - a Heath HD 3030. But the best part of all was I used my Teletype Model 19 with the Model 14 non-typing re-perf.

I'm sure I got more of a workout than the guys with the computers, MCP's and modern rigs. Once I found someone calling CQ, I had to zero beat the rig, cut a tape calling the guy and sending my exchange information, then send the tape with one hand on the TD switch and one hand on the T/U switch! My shoulders ache! But, by next year I hope to have some of the control wiring revised to make it easier. I was just glad to get on the air because as of a month ago,

none of the gear mentioned above worked very well at all. For three hours of operation, I made 38 contacts on three bands. Since I never call CQ in contests, I think it was fairly good.

But man, were my ears ringing last night to the tune of 2125 hertz and the loud clang of the machines. Life can't get much better.

73,
Dale
WD9GWH

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: "Edward J. Zeranski" <ejz@nosc.mil>
Subject: S-41W/G Sams
Message-ID: <2.2.32.19970106175113.00f4f3c0@marlin.nosc.mil>

A month or so ago I sent someone on the list a Sams for the Halli S-41. A friend just got an S-41 and needs the schemo etc. Will gladly pay copy and post fees. Thanks

Ed Zeranski ejz@marlin.nosc.mil, work
ezeran@cris.com home
Wooden Boats, Tube Receivers, Rusty Old Trucks, The Good Stuff!

This is a private opinion or statement and is nobody's fault but mine. No person, employer, or govt. should try to take credit for it!

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Jack Ray <k4mzw@akorn.net>
Subject: Shack Cleaning, Again!
Message-ID: <32D0F826.71BD@akorn.net>

Hi gang and Happy New Year:

I have the following items for sale, ALL PRICES INCLUDE SHIPPING CONUS:

Drake T4X,R4,MS4/AC	Excellent	\$ 265.00
Johnson Ranger	Mint	275.00
(2) Magnum-Six	Speech processors	Excellent 85.00ea
Hallicrafters S-82	"Civic Patrol" 30-50mhz	45.00
Johnson Matchbox	(275watt)	175.00
Heathkit AC-1	Matches AT-1	40.00
Heathkit SWR Bridge	(old style) Matches DX-20	20.00
1pr. 572B's	"Pulls-Good"	50.00

1pr. 572B's NIB (Dayton Prize '96)	90.00
Heathkit SB-200 Excellent	325.00
Shure 450T NIB	40.00

Gotta make room I keep buying more and Larger radios :>(!

Regards..... Jack

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: don merz <71333.144@CompuServe.COM>
Subject: Swan FS, RCA WTB
Message-ID: <970106162641_71333.144_DHB44-1@CompuServe.COM>

Vintage Radio Gear For Sale

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
412-234-8819 (weekdays, EST or leave a message anytime).
71333.144@compuserve.com

Swan 250 6 meter SSB/CW/AM transciever. Dual 6146's in the final. Great Swan looks. One knob wrong. Otherwise complete and original. Receiver working reasonably well. Transmit side is flakey though finals are strong. Needs TLC. \$150

Swan 117X power supply. This is the Swan supply that was used to run virtually the entire product line--250, 350, 500 etc. This model is the one without the speaker cabinet--it is just the bare supply. I have 3 of these and this one has the most hum of the 3 but it is still quite useable. \$50. I will not sell this until I see if the Swan 250 buyer needs it.

Radio Craft Amateur Radio Builder's Guide. Edited by Hugo Gernsback, 1947. VG or excellent. 64 pages. \$18

WANTED

RCA ACR-155 chassis or junker
RCA ACR-175 concentric main tuning knobs

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: launerb@crl.com (William H. Launer)
Subject: Re: SX-117 Selectivity
Message-ID: <v01530501aef70da559f6@[192.0.2.1]>

At 04:36 PM 1/5/97 -0600, Harry Vaught wrote:

>When switching to the .5 kc selectivity position on my SX-117,

>there is a severe loss of gain and the S-meter reading drops.
> ----- Does anyone have any ideas?

I had the same problem with my Hammarlund SP-600. After I aligned the if's in accordance with the manual, I did the following:

1. Set Selectivity in the sharpest position.
2. Center the XTAL Phasing control.
3. AVC - Off
4. Mod-CW in Mod (am) position.
5. Inject an unmodulated carrier through the receiver front end.
(I used a crystal marker as a source, but you could use a signal generator, or the crystal calibrator if the receiver has one - the SP-600 doesn't have one).
6. Tune the test signal for a peak, using the receiver s-meter.
7. Peak the if transformers, using the s-meter as an indication.

After I did this, I tested it by tuning in an am bc carrier, with the Selectivity in the sharpest position, then rotating through the selectivity positions. The s-meter remained essentially constant through all positions. A cw signal seems to have the same volume in all selectivity positions, also. There may be some flaw in this method, but it seemed to work for me.

73, Bill wb0cld

Bill Launer
St. Charles, MO
launerb@crl.com
wb0cld@wb0cld.ampr.org [44.46.66.25]
qrp-l #279 qrp arco #3551
Grid Square EM48RT

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: anders@autopsy.corp.sgi.com (Greg Anders)
Subject: Re: SX-117 Selectivity
Message-ID: <9701061351.ZM11523@autopsy.corp.sgi.com>

It would make sense to me that an oscilloscope would be more accurate than an s-meter if you have one. It makes a big difference in alignment of my AR-88 and several articles I referenced for the AR-88 restoration cautioned against using the s-meter.... They claimed it is too easy to miss the center of the bandpass on such a narrow setting. FWIW...

--

Greg Anders

"One doesn't discover new lands without consenting to lose sight of the shore for a very long time."

Andre Gide
French Novelist

anders@autopsy.corp.sgi.com
KG6YV

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: dr.electron@juno.com (Richard L Paton)
Subject: RE: Variac pyrotechnics....
Message-ID: <19970106.012146.11910.0.dr.electron@juno.com>

Jack,
Thanks for the thought....
I haven't gotten too excited about that project since incident, but I'll open her up again & look around (& Sniff)
Rich P
P.S. I love this list service !!!!!
"doc"

#

From boatanchors@theporch.com Mon Jan 6 19:11:24 1997
From: J P Taillebois <jpt1@idirect.com>
Subject: Re: want military gear
Message-ID: <199701062236.RAA26065@nemesis.idirect.com>

Would anyone know what the following is?

```
>>on any of the compontens...the only reference is on the hand crank
>>generator and it
>>states that it is manufactured by the warwick manufacturing corp. (heres
>>whats on the
>>lable)
>>.....
>>.....
>>signal corps                                u.s. army
>> .
>>                                generator    gn-58
>> .
>>6.3 volts - 2.45 ampere      425 volts - ,115 ampere .
>>1.4 volts - .45 ampere      105 volts - .032 ampere
>>      WARWICK MANUFACTURING CORP      ..
>>.....
>>.....
>>
>>The radio is divided up into four seperate boxes. that are black and have
>>numbers
>>on each one whic are : RA-6,RR-6,RA-6 And RP-6.
>>the transmitter has a freq coverage of 3.0 MC 7.0 and has a monitor
>>volume ctrl which
>>i suppose is for side tone keying. it has one xtal socket.
>>
>>the rx is variable and covers 3-15 mhz.
>>it also has a xtal plugged into the upper left hand edge which has RT-6
>>stamped on
>>it with a freq of 4182 kc and 8364 kc,above the freq it is also stamped
>>GR-5/U.
>>
```

Thanks

73

Jean Paul Taillebois 996 Greenlane court, Oshawa, Ontario,Canada M1K-2C6
e.mail jpt1@idirect.com
packet: ve3jpt@va3vw
voice:905-723-1811
fax/data:905 723-9156
Collector: Hallicrafters,Central-Electronic,Gonset, Military BA, antique
radio memorabilia.

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: Dennis Gibbs <dgibbs@rational.com>
Subject: Where is the tube 6336A used?
Message-ID: <01BBFBBC.05E46C20@peace.rational.com>

Greetings all,

As many of you know I recently acquired two TMC SSB converters (not CV-591As). Each uses a 6336A tube in its power supply. As I always do when I acquire a new piece of equipment, I began to make a list of its tube complement so that I could acquire spares.

Interestingly, I noted that the 6336A is sold by Antique Electronic Supply for \$53.50 in their 1996 catalog. Davilyn in their 1993 catalog listed it for \$70.00!

I became curious as to why this tube is so expensive. Initially I figured it was used in some amateur transmitter or receiver, or possibly some audio equipment (The 6336A is a dual-triode). But I checked Raymond Moore's Receiver book, as well as the transmitter book, but nothing is listed as using the 6336A. A friend of mine who is into vintage guitar amplifiers and audio amps is not aware of any equipment that uses it either.

Interestingly, the only other place I have heard this tube mentioned is in the Cost Reduction report on the R390A. It seems that a single 6336A was being considered initially as the replacement (as part of the redesign) for the twin 6082 tubes used in the R390. But as we all know, this never happened. (The report mentioned that a single 6336A had about the same heat generation as the twin 6082s!).

Anyway, I have since acquired some 6336As at a more reasonable price, but I am still left with a mystery: Why is this tube so expensive? Can anyone tell me what other equipment uses this tube?

Also a followup question: Does anyone have the proper settings to test this tube on a TV7D/U Tube Tester?

Regards,

Dennis Gibbs
dgibbs@rational.com

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: John Shriver <jas@shiva.com>

Subject: Re: Where is the tube 6336A used?
Message-ID: <199701061636.LAA25298@shiva-dev.shiva.com>

The 6336A is used in some Tek gear, as a pass tube in the voltage regulator. For instance, in the 129, which will power four 2/3 series plugins. It's also used in other test and scientific equipment. I have one dud that's labeled Beckman, a major maker of scientific lab equipment.

Thus, I think it's always been somewhat expensive. Never really got cheap. There's a demand to keep this stuff working.

Even when it was in production, it was pretty pricey, given the hard glass (Pyrex) envelope, and the graphite plates.

However, the audiophiles (in particular, the Japanese audiophiles) have found it too. They play with it in both PP and SE transformer-output amps, and in output-transformer-less amps too. Not in the quantity that they are using 211/VT-4C's, however.

From boatanchors@theporch.com Mon Jan 6 11:57:02 1997
From: MEC <danmec@inet.uni-c.dk>
Subject: WTB Bird 43 plug-in
Message-ID: <Pine.3.89.9701061352.A3331-0100000@inet.uni-c.dk>

Gentlemen,

I need a HF 2-30 MHz plug in for Bird 43 for power level f ex 2 or 5 KW

Any out there collecting dust ?

73 Rag OZ8RO in Copenhagen